



Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. Please amend the claims as follows:

Listing of Claims:

1. (Currently amended) A method of disseminating information to a plurality of nodes, the nodes connected in a network environment, said method comprising:
receiving, at a given node, a disseminated message, the message having broadcast-type information; and
sending the received message to a plurality of other nodes identified in a partial view, wherein the partial view is specific to each node, resides locally, and identifies ~~some of the other network nodes~~
a subset of the other network nodes, wherein the subset may comprise any of the network nodes independent of hierarchical relationships.
2. (Original) A method as defined in claim 1 wherein the act of sending the message to a plurality of nodes further comprises delivery of the message to all nodes identified in the partial view.
3. (Original) A method as defined in claim 1 wherein each node in the network maintains a partial view.
4. (Original) A method as defined in claim 1 wherein the partial view comprises address information for a plurality of nodes on the network, but less than all nodes on the network.
5. (Original) A method as defined in claim 1 further comprising:
determining whether the received message has been previously received; and
if the message has been previously received, then the message is not sent to any other nodes.

6. (Original) A method as defined in claim 5 further comprising the act of storing identification information related to the received message to enable the determination of whether the message has been previously received.

7. (Original) A method as defined in claim 1 further comprising:
determining whether the message is a broadcast-type message; and
if the message is not a broadcast-type message, the message is not sent to other nodes.

8 - 19 (Canceled).

20. (Currently amended) A computer system for disseminating information in a distributed network comprising:

a receive module for receiving a broadcast message;

a storage module for storing information related to other nodes in the network in a partial view, wherein the partial view is specific to each node and independent of hierarchical relationships; and

a communication module for transmitting broadcast information to nodes indicated in the partial view.

21. (Original) A computer system as defined in claim 20 wherein the partial view comprises address information for some of the nodes in the network.

22. (Original) A computer system as defined in claim 20 wherein the communication module transmits broadcast information to all nodes identified in the partial view.

23. (Currently amended) A computer system as defined in claim 20 wherein the computer system is part of a distributed network of computer systems, and wherein other computer systems in the network maintain a partial view of the ~~entire~~ network.

24. (Original) A network of nodes having the ability to communicate information between said nodes, said network comprising:

an application-based broadcast protocol using a gossip-based algorithm;

each node maintains a partial view of the network; and
each node gossips only to other nodes identified in the partial view.

25. (Original) A computer readable medium having stored thereon a data structure comprising:

a first identification field for storing address location information for a node in a network environment;

a second identification field for storing address location information for another node in a network environment;

wherein the first and second identification fields represent a partial view of the network environment; and

wherein the data structure is used for a gossip-based communication between the nodes in the network.

26. (Original) A data structure as defined in claim 25 having a plurality of additional identification fields, each field identifying address information for different nodes in the network.

27-29 (Canceled).

30. (New) A method as defined in claim further comprising dynamically updating one or more partial views, wherein the act of updating the partial view comprises:

receiving a request to subscribe to the network from a new node;

determining whether to keep the information related to the new node; and

if the new node information is to be kept, storing identifying information related to the new node; and

forwarding the subscription request message to at least one other node in the network.

31. (New) A method as described in claim 30 wherein the determining act further comprises:

predetermining a threshold value;

upon receipt of the request to subscribe, generating a random number;

comparing the random number to the predetermined threshold value; and
based on the results of the comparison determining whether to keep the information related to the new node.

32. (New) A method as defined in claim 31 wherein the threshold value relates to whether the subscribing node randomly chose the receiving node.

33. (New) A method as defined in claim 30 wherein the subscription request is received by a node having a partial view of the network and wherein the subscription request is forwarded to all nodes identified in the partial view of the receiving node.

34. (New) A method as defined in claim 30 wherein the subscription request is received by a node having a partial view of the network and wherein the subscription request is forwarded to only one node identified in the partial view of the receiving node.

35. (New) A method as defined in claim 33 further comprising:
receiving a forwarded subscription request;
determining whether to keep the new subscription request based on predetermined criterion; and
keeping the new node information if the predetermined criterion is satisfied.

36. (New) A method as defined in claim 30 further comprising:
determining whether the new subscription request is new or forwarded; and
if forwarded, determine whether to keep the information based on a predetermined criteria wherein the predetermined criteria relates to a random selection.

37. (New) A method as defined in claim 36 wherein the predetermined criterion relates to a probability inversely proportional to the size of the partial view for the existing node.

38. (New) A method as defined in claim 37 wherein the predetermined criterion further relates to the distance between the new node and the existing node.